

### **REMARKS / ARGUMENTS**

The present application includes pending claims 1-30, all of which have been rejected. The Applicant respectfully submits that the claims define patentable subject matter.

Claims 1-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,188,209, issued to Petty (hereinafter, Petty), in view of U.S. Patent No. 7,339,786, issued to Bottom (hereinafter, Bottom). The Applicant respectfully traverses these rejections at least based on the following remarks.

#### **I. EXAMINER'S RESPONSE TO ARGUMENTS**

At page 2 of the Final Office Action, the Examiner disagrees with the Applicant's argument that the combination of Petty and Bottom, especially Bottom, does not disclose or suggest "negotiating a data rate for transfer of data between said first blade server and at least said second blade server," as recited by the Applicant in claim 1.

The Examiner states the following in the Final Office Action:

"It is noted that in Bottom et al., fig. 1A, col.3, lines 45-55; a server 100 supports up to 2 switch blades 120. The switch blades 120 have 20 10/100Base-T auto negotiation ports. It is well-known in the art that by having 10/100Base-T auto negotiation in the switch blades 120, the switch blades 120 are able to negotiate data rates between 10Mbps and 100Mbps to transfer to another switch blade 120. **Examiner believes** that at least **Bottom** et al. disclose **negotiating a data rate for transfer of data between blade servers**. Further, by combining the teaching of Bottom into Petty, it would have been obvious to determine if the packet received at the first blade server at a first rate need to be negotiated

before transferring the packet to a second blade server at a second data rate.”

See page 2 of the Final Office Action. The Examiner relies for support on the following citation of Bottom:

“A removable fan tray with cooling fans 160 (see also FIG. 2) may be utilized to provide cooling air flow within the modular server system 100 to cool the modules therein. ... The sharing of the power supplies 130 and cooling fans 160 provides a more efficient use of the resources of the modular server system 100 and minimizes space.”

See Bottom at col. 3, lines 45-55. Bottom simply describes the efficient use of space and power resources in a modular server system. The Applicant questions the relevancy of the above citation by the Examiner in relation to “negotiating a data rate for transfer of data between said first blade server and at least said second blade server,” as recited by the Applicant in claim 1.

In addition, in the Examiner’s response to arguments (see Final Office Action at page 2), the Examiner merely states that “...Examiner **believes**” that at least **Bottom et al.** disclose **negotiating a data rate for transfer of data between blade servers**” without any specific support from the Bottom reference. The Applicant refers the Examiner to MPEP at § 2142, which states:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142. Therefore, based on the guidelines of MPEP at § 2142, the Examiner is respectfully requested to provide to the Applicant factual support to the

allegation that "it is well known that the 10/100 Base-T autonegotiating ports are for negotiating a data rate between 10Mbps and 100Mbps to transfer to another switch blade 120".

Furthermore, the Applicant refers the Examiner to the following citation of Bottom:

"The modular server system 100 illustrated in FIG. 1 ... In an embodiment of the present invention, the **switch blades 120 have twenty 10/100 Base-T autonegotiating ports and support 4,096 Media Access Controller (MAC) addresses.** Preferably, of the twenty ports, **sixteen of them are assigned to one Ethernet channel from the system's 100 midplane 170** (connected to all sixteen server blades 110, as illustrated in the example in FIG. 1), and **the remaining four ports are accessible through R7-45 (Ethernet) connectors,** .... Data packets are preferably buffered in the switch blade 120 **so that Ethernet collisions do not occur on any channel,** and a full-managed Layer  $\frac{3}{4}$  switch may provide Quality of Service (QoS) control, while **in all cases a non-block switch fabric with sufficient bandwidth to prevent packet loss is recommended."**

See Bottom at col. 3, lines 8-27. The Applicant points out that the 10/100-Base-T autonegotiating ports disclosed by Bottom are simply Ethernet connector hardware, compliant to the 10-Base-T and the 100-Base-T Ethernet standard. Bottom **does not** disclose or suggest that the 10/100-Base-T autonegotiating ports perform any data rate negotiation for transfer of data between blade servers, as suggested by the Examiner. Bottom instead discloses that the 10/100-Base-T autonegotiating ports are for connection to the 4,096 MAC addresses (channels). Bottom in fact discloses that the switch blades performs QoS control, by routing the packets to the proper server blades 110 (i.e., by channel selection using MAC addresses) to avoid Ethernet collision to

occur on any channel and packet loss. In other words, Bottom discloses that the autonegotiating ports on the switch blades 120 are for packet traffic (channel) routing, not data rate negotiation for transfer.

Based on the foregoing rationale, the Applicant maintains that the combination of Pettey and Bottom does not disclose or suggest "negotiating a data rate for transfer of data between said first blade server and at least said second blade server," as recited by the Applicant in claim 1 and claim 1 is respectfully submitted to be allowable.

Likewise, independent claims 11 and 21 are similar in many respects to the method disclosed in independent claim 1. Therefore, the Applicant submits that independent claims 11 and 21 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 1.

### **REJECTION UNDER 35 U.S.C. § 103**

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure, Rev. 6, Sep. 2007 ("MPEP") states the following:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). Further, MPEP § 2143.01 states that “the mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art” (citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007)). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

## **II. The Proposed Combination of Pettey and Bottom Does Not Render Claims 1-30 Unpatentable**

### **A. Rejection of Independent Claims 1, 11, and 21**

With regard to the rejection of independent claim 1 under 35 U.S.C. § 103(a), the Applicant submits that the combination of Pettey-Bottom does not disclose or suggest at least the limitation of “negotiating a data rate for transfer of data between said first blade

server and at least said second blade server,” as recited by the Applicant in independent claim 1.

The Final Office Action states the following:

Petty et al. does not disclose negotiating a data rate for transfer of data between said first blade server and at least said second blade server. Bottom et al. discloses in fig. 1A, col.3, lines 32-65; a modular server system 100 (a server platform) comprising switch blade 120 (switch blade) and a plurality of blade servers 110 connected via midplane 170. The switch blade 120 is capable of 10/100 base-T auto-negotiating between 16 blade servers 110 (rate negotiating from first rate to second rate and vice versa between said first blade server and said second blade server). Further, the switch blade 120 also performs network switching between server blades (see col.8, lines 30-38).

See the Final Office Action at page 3. The Final Office Action concedes that Pettay does not disclose the above stated limitation and then seeks support in fig. 1A and col.3, lines 32-65 of Bottom. Bottom, at col. 3, lines 32-65, simply discloses that the modular server system 100 may support four switch blades 120 **for network switching**. More specifically, Bottom discloses that the switch blades 120 are 20-port **network switches**, where two switch blades 120 are utilized for network switching within the modular server system 100, and additional switch blades 120 may be added for high availability redundancy. See Bottom at col. 4, lines 4-9 and 63-66; col. 8, lines 30-38. **Bottom, including col. 3, lines 32-65, does not disclose that the switch blades 120 perform any data rate negotiation for transfer of data between a first blade server and a second blade server.**

Specifically, the Examiner relies for support on the following citation of Bottom:

“A removable fan tray with cooling fans 160 (see also FIG. 2) may be utilized to provide cooling air flow within the modular server system 100 to cool the modules therein. ... The sharing of the power supplies 130 and cooling fans 160 provides a more efficient use of the resources of the modular server system 100 and minimizes space.”

See Bottom at col. 3, lines 45-55. Bottom simply describes the efficient use of space and power resources in a modular server system. The Applicant questions the relevancy of the above citation by the Examiner in relation to “negotiating a data rate for transfer of data between said first blade server and at least said second blade server,” as recited by the Applicant in claim 1.

In addition, in the Examiner’s response to arguments (see Final Office Action at page 2), the Examiner merely states that “...Examiner **believes**” that at least **Bottom et al.** disclose **negotiating a data rate for transfer of data between blade servers**” without citing for specific support from the Bottom reference. The Applicant refers the Examiner to MPEP at § 2142, which states:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142. Therefore, based on the guidelines of MPEP at § 2142, the Examiner is respectfully requested to provide to the Applicant factual support to the allegation that “it is well known that the 10/100-Base-T autonegotiating ports are for negotiating a data rate between 10Mbps and 100Mbps to transfer to another switch blade 120”.

Furthermore, the Applicant refers the Examiner to the following citation of

Bottom:

“The modular server system 100 illustrated in FIG. 1 ... In an embodiment of the present invention, the **switch blades 120 have twenty 10/100 Base-T autonegotiating ports and support 4,096 Media Access Controller (MAC) addresses.** Preferably, of the twenty ports, **sixteen of them are assigned to one Ethernet channel from the system's 100 midplane 170** (connected to all sixteen server blades 110, as illustrated in the example in FIG. 1), and **the remaining four ports are accessible through R7-45 (Ethernet) connectors,** .... Data packets are preferably buffered in the switch blade 120 **so that Ethernet collisions do not occur on any channel,** and a full-managed Layer  $\frac{3}{4}$  switch may provide Quality of Service (QoS) control, while **in all cases a non-block switch fabric with sufficient bandwidth to prevent packet loss is recommended.**”

See Bottom at col. 3, lines 8-27. The Applicant points out that the 10/100-Base-T autonegotiating ports disclosed by Bottom are simply Ethernet connector hardware, compliant to the 10-Base-T and the 100-Base T Ethernet standard. Bottom **does not** disclose or suggest that the 10/100-Base-T autonegotiating ports perform any data rate negotiation for transfer of data between blade servers, as suggested by the Examiner. Bottom instead discloses that the 10/100-Base-T autonegotiating ports are for connection to the 4,096 MAC addresses (channels). Bottom in fact discloses that the switch blades perform QoS control, by routing the packets to the proper server blades 110 (i.e., by channel selection using MAC addresses) to avoid Ethernet collision to occur on any channel and packet loss. In other words, Bottom discloses that the autonegotiating ports on the switch blades 120 are for packet traffic (channel) routing, not data rate negotiation for transfer.



Based on the foregoing rationale, the Applicant maintains that the combination of Pettey and Bottom does not disclose or suggest “negotiating a data rate for transfer of data between said first blade server and at least said second blade server,” as recited by the Applicant in claim 1 and claim 1 is respectfully submitted to be allowable.

Accordingly, independent claim 1 is not unpatentable over Pettey-Bottom and is allowable. Independent claims 11 and 21 are similar in many respects to the method disclosed in independent claim 1. Therefore, the Applicant submits that independent claims 11 and 21 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 1.

**B. Rejection of Dependent Claims 2-10, 12-20, and 22-30**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 11, and 21 under 35 U.S.C. § 103(a) has been overcome and requests that the rejection be withdrawn. Additionally, claims 2-10, 12-20, and 22-30 depend from independent claims 1, 11, and 21, respectively, and are, consequently, also respectfully submitted to be allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 1-30.

**CONCLUSION**

Based on at least the foregoing, the Applicant believes that all claims 1-30 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and requests that the Examiner telephone the undersigned Agent at (312) 775-8093.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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